REMARKS

Claims 1, 5, 7-14, 20-22 and 31-32 have been amended. Claims 18-19 and 23-30 have been canceled.

Applicants submit that claim 1 as amended is patentable over U.S. Patent No. 6,061,686 issued to Gauvin et al. ("Gauvin"). Gauvin discloses:

If the client computer 200 is connected to the network 295, the address (i.e., URL) of the web page is determined from the request. A fetch command then is transmitted to the remote server having the web page, thereby causing the client computer 200 to download the web page from the remote server. Conversely, if the client computer 200 is not connected to the network 295, the system includes a mechanism for locating the web page in the memory of the client computer 200 if such web page already had already been downloaded. The downloaded web page preferably is stored in a local directory structure constructed as discussed below with reference to FIGS. 11C, 11D, and 11E....

This update captures any modifications made to the web page at the origin web site while the client computer 200 was not connected to the network 295 (i.e., during disconnect). This aspect of the system (referred to herein as "autoupdate") updates the downloaded web page copy with a minimum of client computer processor usage, thereby maximizing the speed and efficiency of the client computer 200 during the update process.

(Column 4, line 44 through Column 5, line 5).

However, Gauvin does not disclose "sending the one or more modified attributes of the information object across the network to the consumer process," where the amount of information contained by the one or more modified attributes is less than the amount of information contained by the information object, as recited in claim 1 as amended. Gauvin also does not disclose "synchronizing the second instance of the information object based on the one or more modified attributes," as recited in claim 1 as amended.

Therefore, applicants submit that claim 1 as amended is patentable over Gauvin.

Given that claims 2-10 and 12-16 depend from claim 1 as amended, applicants submit that these claims are also patentable over Gauvin.

Applicants submit that claims 20-21 are patentable over Gauvin. Gauvin neither discloses nor suggests "propagating at least one of the changed attributes of the data definition across the network," as recited in claim 20 as amended. Gauvin further does not disclose nor suggest "using the consumer process to access the information object according to at least one of the changed attributes of the data definition," as recited in claim 20 as amended.

Therefore, applicants submit that claim 20 is patentable over Gauvin. Given that claim 21 depends from claim 20 as amended, applicants submit that claim 21 is also patentable over Gauvin.

Applicants submit that claims 22 and 31-32 are patentable over Gauvin in view of U.S. Patent No. 5,737,592 issued to Nguyen et al. ("Nguyen").

Gauvin does not disclose "propagating at least one of the changed attributes of the data definition across the network," as recited in claim 20 as amended. Gauvin further does not disclose "using the consumer process to access the information object according to at least one of the changed attributes of the data definition," as recited in claim 20 as amended.

Nguyen discloses:

The user manipulates the HTML input form via the Web browser 12, by selecting functions and/or entering data into input boxes. When the user invokes a "submit" or "post" command, the data from the HTML input form, along with the command, is transmitted from the Web browser 12 to the Web server 14. The command would comprise a universal resource locator (URL) that invokes communications between the Web server 14 and the DB2 WWW gateway 16.

The DB2 WWW gateway 16 extracts the user inputs from the HTML

PA:52113927.1 7/18/03 10:42 AM input form, retrieves the associated macro language file 20, and substitutes these inputs into an SQL query from the macro language file 20. The DB2 WWW gateway 16 then transmits the SQL query to the RDBMS server 18 for execution. After performing an SQL query, the RDBMS server 18 returns the results of the SQL query, i.e., an output table, to the DB2 WWW gateway 16. The DB2 WWW gateway 16 extracts data from the output table and substitutes it into an HTML report form from the macro language file 20 using a common name space. A common name space arises from the use of common variables in both the HTML and SQL statements in the macro language file, and the cross-language variable substitution mechanism of the present invention. The resulting HTML report form is transmitted by the DB2 WWW gateway 16 to the Web server 14. The Web server 14 transmits the HTML report form to the Web browser 12 for presentation to the user. This interaction between the Web browser 12, the Web server 14, the DB2 WWW gateway 16, and the RDBMS server 18 may continue in a similar manner according to the user's direction.

DEVELOPMENT ENVIRONMENT

FIG. 3 shows schematically an overview of the preferred embodiment of the present invention, and in particular, shows the relationship between the user runtime environment and the application development environment of the present invention.

As mentioned earlier, the runtime environment includes the interaction between clients 12 executing Web browsers and Web servers 14, DB2 WWW gateways 16, and RDBMS servers 18. Access to the RDBMS server 18 and associated relational database via the DB2 WWW gateway 16 is controlled by programming stored in macro language files 20.

(Column 4, line 63 through Column 5, line 36).

Nguyen does not disclose "propagating at least one of the changed attributes of the data definition across the network," as recited in claim 20 as amended. Nguyen further does not disclose "using the consumer process to access the information object according to at least one of the changed attributes of the data definition," as recited in claim 20 as amended.

Even if Gauvin and Nguyen were combined, the combination would neither teach nor suggest "propagating at least one of the changed attributes of the data definition across the

network," as recited in claim 20 as amended. The combination further would neither teach nor suggest "using the consumer process to access the information object according to at least one of the changed attributes of the data definition," as recited in claim 20 as amended.

Therefore, applicants submit that claim 20 as amended is patentable over Gauvin in view of Nguyen. Given that claim 22 depends from claim 20 as amended, applicants submit that claim 20 is also patentable over Gauvin in view of Nguyen.

Gauvin and Nguyen, alone or in combination, neither teach nor suggest "means for transferring at least a portion of each identified information object from the Internet to the first computer," as recited in claim 31 as amended. Gauvin and Nguyen, alone or in combination, further neither teach nor suggest "means for using the processor to receive at least a portion of each identified information object," as recited in amended claim 31.

Therefore, applicants submit that amended claim 31 is patentable over Gauvin in view of Nguyen. Given that claim 32 depends from claim 31 as amended, applicants submit that claim 32 is also patentable over Gauvin in view of Nguyen.

Applicants submit that claim 17 as amended is patentable over Gauvin in view of U.S. Patent No. 6,205,471 issued to Gilchrist et al. ("Gilchrist").

Gauvin does not disclose "sending the one or more modified attributes of the information object across the network to the consumer process," as recited in claim 1 as amended.

Gilchrist discloses:

Two framework extensions that might be made by a framework implementer are illustrated in FIG. 15. One Address subclass or object extension contains the Internet standard SMTP (Simple Message Transport Protocol) form of e-mail addresses (shown as SMTPAddress in the figure). Another Address subclass holds the IBM Corporation

PA:52113927.1 7/18/03 10:42 AM SNADS/OfficeVision (System Network Architecture Distribution Services) form of e-mail addresses (shown as SNADSAddress in the figure). Object oriented technology permits these extended object classes to further define their own specific methods or attributes. These particular subclasses are not part of the framework definition, but might be part of their support, as required by the framework implementer.

FIG. 16 is a class diagram that illustrates the objects that make up the framework's EnvelopeList class. The class is shown having a "has" relationship with a class called Envelope. The relationship of the objects in the Envelope class to the EnvelopeList class is considered to be "core", which means it is not modifiable in terms of the framework. There can be any number of EnvelopeList objects, but each is used or referenced by a single instance of a Message object. An EnvelopeList object contains the list of Envelope objects of a specific e-mail message. An Envelope object is defined by the framework to hold information about an e-mail message, such as its priority, title, subject matter, and so forth. This information is also known as e-mail "header" information, as it describes attributes of an e-mail message to the messaging service but is not the message content. Thus, there will be an Envelope object associated with the e-mail message and the Envelope objects help determine the processing that the e-mail message will receive as it is transferred by the framework system to the message recipients.

(Column 19, line 62 through Column 20, line 27).

However, Gilchrist does not disclose "sending the one or more modified attributes of the information object across the network to the consumer process," as recited in claim 1 as amended.

Even if Gauvin and Gilchrist were combined, the combination would neither teach nor suggest "sending the one or more modified attributes of the information object across the network to the consumer process," as recited in claim 1 as amended.

Therefore, applicants submit that claim 1 as amended is patentable over Gauvin in view of Gilchrist. Given that claim 17 depends from claim 1 as amended, applicants submit that claim 17 is also patentable over Gauvin in view of Gilchrist.

CONCLUSION

Applicants respectfully request that the foregoing amendments be entered before examination of the above-captioned application. If, the Examiner has any questions or comments regarding this amendment, the Examiner is respectfully requested to contact the undersigned at the number listed below.

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Respectfully submitted,

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